



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification<sup>7</sup>:

A43B 3/12, 13/12

A3

(11) International Publication Number:

WO 00/13537

(43) International Publication Date:

16 March 2000 (16.03.00)

(21) International Application Number: PCT/US99/20297

(22) International Filing Date: 3 September 1999 (03.09.99)

(30) Priority Data:

09/148,306

4 September 1998 (04.09.98)

US

09/196,977

20 November 1998 (20.11.98)

US

(71) Applicant (for all designated States except US): THATCHER, Mark [US/US]; 1245 Cochran Avenue, Flagstaff, AZ 86001 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): RITTER, Brett, D. [US/US]; 3737 Torino Drive, Santa Barbara, CA 93105 (US). BUTLER, Damon, R. [US/US]; 803 Moreno Road, Santa Barbara, CA 93103 (US). MCGEOUGH, Barry, Joseph [US/US]; 1240 E. Cota, Santa Barbara, CA 93103 (US). NORTON, Edward, J. [US/US]; 92 Middleton Road, Boxford, MA 01921 (US). SMOTRYCZ, Zenon, O. [US/US]; 51 Avalon Road, Reading, MA 01867 (US).

(74) Agent: HAUFF, Charles, F., Jr.; Snell &amp; Wilmer L.L.P., One Arizona Center, 400 E. Van Buren, Phoenix, AZ 85004-0001 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

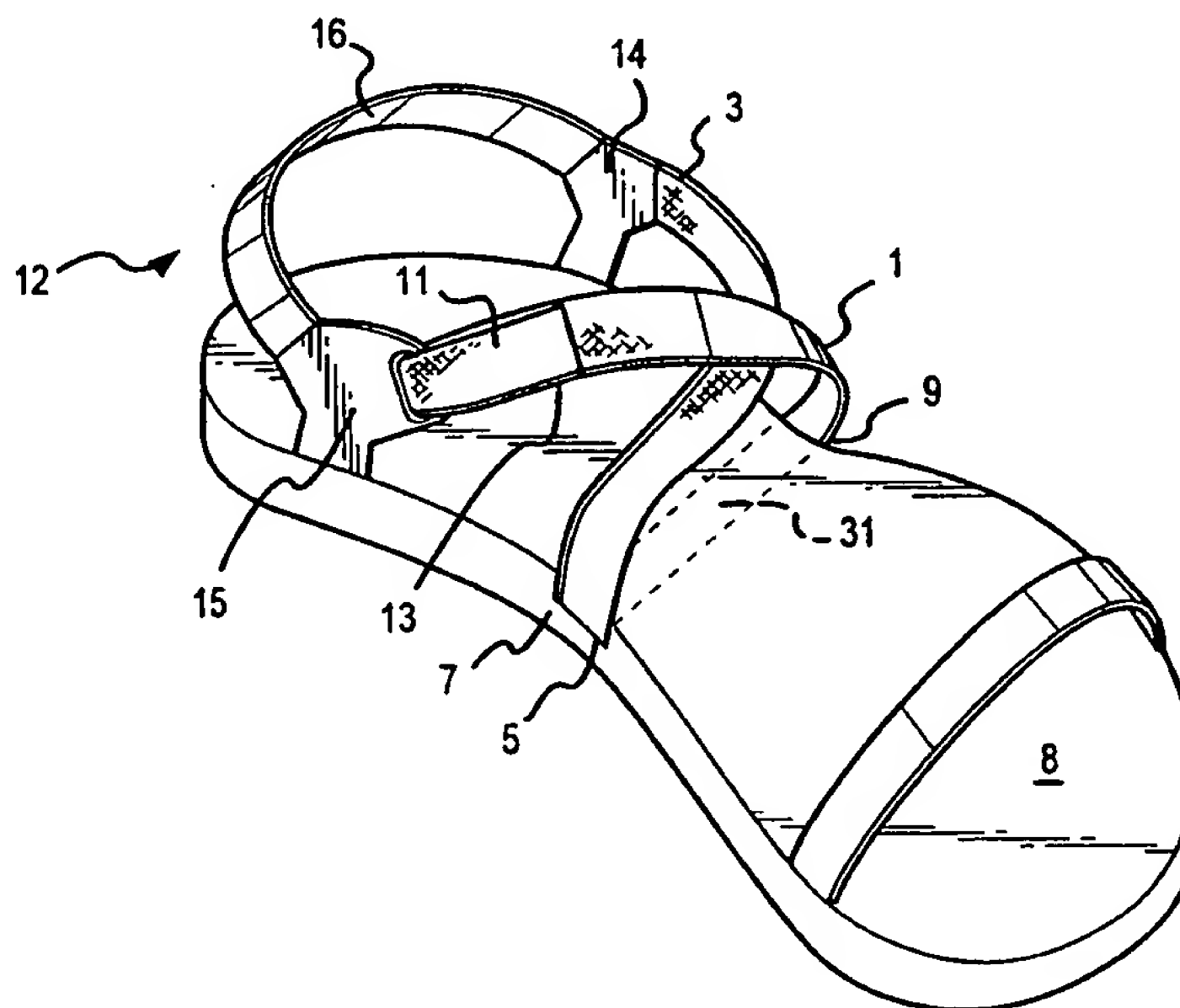
Published

With international search report.

(88) Date of publication of the international search report:

20 July 2000 (20.07.00)

(54) Title: FOOTWEAR SOLE AND ARCH STRAPPING SYSTEM



(57) Abstract

A strapping system for footwear comprises a strap (1) that has a first end (3) connected to a first side of a heel portion (12) of footwear, passes over the instep of a foot, through a channel (31) extending through the midfoot of the footwear sole and back over the foot instep to thereby forming an X shape over the wearer's foot. The strap (1) has a second end (11) which may be adjustably connected to the second side of a heel portion (12) of a sole. The channel (31) is resilient and rigid so as to allow the strap freedom of movement during use: thereby achieving a dynamic and self adjusting strap fit. A footwear sole comprises relatively soft forefoot and heel portions with a more rigid shank portion therebetween to provide the sole with stiffness and torsional rigidity.